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| 10/765,289 | 01/26/2004 | Tetsuya Shirogane | 16869N-103900US | 2560 |
| 20350 7590 09/04/2008 TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834 | | | | |
| EXAMINER | | | | |
| MORAN, RANDAL D | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/765,289

Applicant(s)

SHIROGANE, TETSUYA

Examiner

RANDAL D. MORAN

Art Unit

2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2008.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15 and 23-33 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 15, 23-33 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/CIS)
4) ☐ Interview Summary (PTO-413)
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____
Paper No(s)/Mail Date _____

DETAILED ACTION

Claims 15, 23-33 are pending.

This Office Action is in response to amendment filed 6/6/2008.

Below, Examiner has pointed out particular references contained in the prior art(s) of record in the body of this action for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claims, other passages and figures may apply as well. Applicant should consider the entire prior art as applicable as to the limitations of the claims. It is respectfully requested from the applicant, in preparing the response, to consider fully each reference in its entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior arts or disclosed by the examiner.

Claim Objections

The objections to **Claims 24 and 30** are withdrawn.

Claim Rejections - 35 USC § 112

The rejection of **Claims 15 and 23-33** under 35 USC 112 are withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. **Claims 15, 23-33** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Thompson (US 6,895,461)**, hereafter "Thompson" in view of **Nelson (US 6,292,838)**, hereafter "Nelson".

Considering **Claims 23 and 29**, Thompson discloses a storage system for processing a command transmitted by a host computer connected to a storage apparatus of the storage system by a network (column 3- lines 59-67, column 4- lines 1-19, Fig. 1), said storage system comprising: a storage apparatus to which the host computer is connected by a network and which stores data to be processed in accordance with said command (column 3- lines 59-67, column 4- lines 1-19, Fig. 5, column 9- lines 25-28, Fig. 5); means for receiving an iSCSI login request transmitted from the host computer (column 7- lines 46-58); means for determining a third determination whether or not a logical unit (LU) specified by the command has been cataloged in the access management table as the LU associated with the source IP address of a frame including the command (column 6- lines 11-42); means for performing said second determination and said third determination in accordance with a source MAC address in the frame of iSCSI login request sent from said host computer and said access management table (column 6- lines 11-42) and means for accessing

the LU to process the command when said LU has been cataloged in the access management table as a result of the third determination (column 6- lines 47-67, column 7- lines 15-30).

Thompson does not explicitly disclose a means for determining a first determination whether or not a source address included in an IP header of the iSCSI login request is an IP address in the same segment as a port of the storage apparatus; means for obtaining a MAC address assigned to the port of the host computer when the source address included in the IP header is not an IP address in the same network as the port of the storage apparatus as a result of the first determination; means for determining a second determination whether or not the MAC address has been cataloged in an access management table that defines the MAC addresses identifying the host computer; means for approving an access by said iSCSI login request from the host computer to the storage apparatus when the MAC address has been cataloged in the access management table as a result of the second determination; when the source IP address of the iSCSI login request is in the same segment as the port of its storage apparatus according to said first determination.

Nelson discloses a means for determining a first determination whether or not a source address included in an IP header of the iSCSI login request is an IP address in the same segment as a port of the storage apparatus (abstract- lines 4-7); means for obtaining a MAC address assigned to the port of the host computer when the source address included in the IP header is not an IP address in the same network as the port of the storage apparatus as a result of the first determination (abstract, column 9- lines

53-50); means for determining a second determination whether or not the MAC address has been cataloged in an access management table that defines the MAC addresses identifying the host computer (column 9- lines 51-67, column 10- lines 1-3, Thompson- Fig. 5); means for approving an access by said iSCSI login request from the host computer to the storage apparatus when the MAC address has been cataloged in the access management table as a result of the second determination (column 9- lines 51-67, column 10- lines 1-3, Thompson- Fig. 5, column 7- lines 45-58); when the source IP address of the iSCSI login request is in the same segment as the port of its storage apparatus according to said first determination (abstract, column 9- lines 35-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Thompson by whether or not a source address included in an IP header of the iSCSI login request is an IP address in the same segment as a port of the storage apparatus; means for obtaining a MAC address assigned to the port of the host computer when the source address included in the IP header is not an IP address in the same network as the port of the storage apparatus as a result of the first determination; means for determining a second determination whether or not the MAC address has been cataloged in an access management table that defines the MAC addresses identifying the host computer; means for approving an access by said iSCSI login request from the host computer to the storage apparatus when the MAC address has been cataloged in the access management table as a result of the second determination; when the source IP address of the iSCSI login request is in the same segment as the port of its storage apparatus

according to said first determination as taught by Nelson in order to make the years of development of security in IP networks instantly available to storage networks and to the storage service providers, allowing them to ensure access control to storage and the privacy of data on their shared infrastructure (Thompson- column 14- lines 45-61).

Considering **Claims 24 and 30**, the combination discloses wherein a command is given to an SNMP manager that transmits a request to the host computer to acquire an MIB for the source IP address included in the iSCSI login request to obtain the MAC address (Nelson- column 12- lines 14-32).

Considering **Claims 15 and 25**, the combination discloses wherein a MAC address is obtained from said host computer by adoption of a protocol based on an iSCSI text mode negotiation (Thompson- column 7- lines 45-58).

Considering **Claims 26 and 31**, the combination discloses log data that the iSCSI login request has been made from a port of another network is recorded in a control memory if the source address included in the IP header were not the IP address in the same network as the port of the storage apparatus according to said the first determination (Nelson- column 8- lines 12-27).

Considering **Claims 27 and 32**, the combination discloses determining whether or not a predetermined time has lapsed without a response received from the host computer, wherein said second determination is performed if the storage apparatus receives an SNMP response to a SNMP request to the host computer without causing a timeout (Nelson- column 10- lines 41-50, Fig. 7).

Considering **Claims 28 and 33**, the combination discloses log data indicating that the access from said host computer has not been approved is recorded in a control memory and processing of the command is not carried out if the requested access is determined to be a disallowed access to the LU on the third determination (Thompson-Fig. 5, Nelson- column 8- lines 12-27, Fig. 3).

Response to Arguments

Applicant's arguments filed 6/6/2008 have been fully considered but they are not persuasive.

In response to applicant's argument that the combination of Nelson and Thomas would become inoperable, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In response to applicant's argument that the present application describes a solution to the problem of a router interposed between host computers and storage by using the multiple determination means of the claims and the access management table, which stores host MAC address information and associated IP address information which is inconsistent to the intended use of Nelson, a recitation of the intended use of the claimed invention must result in a structural difference between the

claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RANDAL D. MORAN whose telephone number is (571)270-1255. The examiner can normally be reached on M-F: 7:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. D. M./
Examiner, Art Unit 2135
/KimYen Vu/
Supervisory Patent Examiner, Art Unit 2135